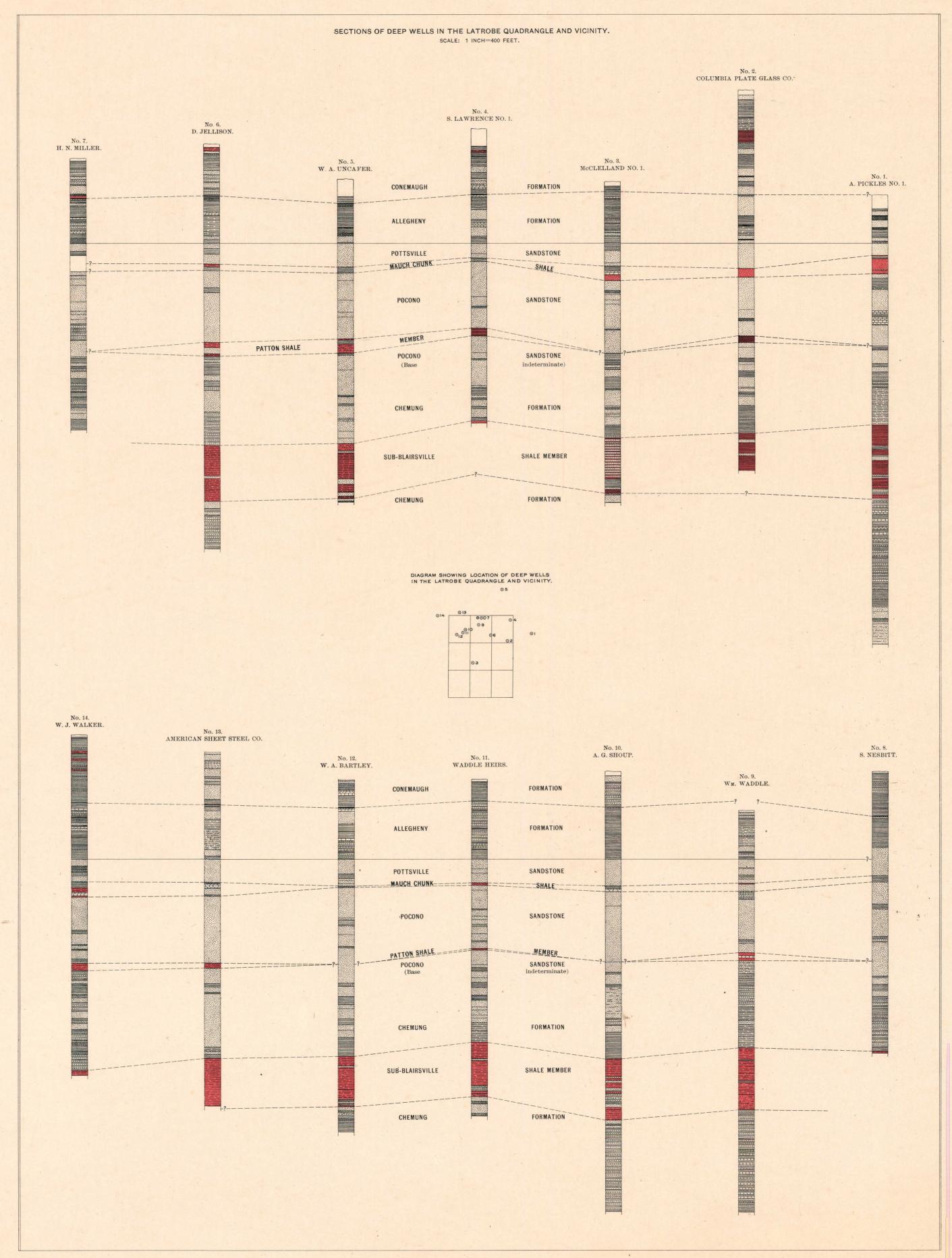
COLUMNAR SECTION

GENERALIZED SECTION FOR THE LATROBE QUADRANGLE. SCALE: 1 INCH=200 FEET.								
Cyromense	SERIES.	FORMATION NAME.	Symbol.	COLUMNAR SECTION.	THICKNESS IN FEET.	NAMES OF MEMBERS.	CHARACTER AND DISTRIBUTION OF MEMBERS.	GENERAL CHARACTER OF FORMATIONS.
83	PERMIAN	Dunkard formation.	Cd		65+	Waynesburg sand- stone. Waynesburg coal.	Coarse sandstone and interbedded sandy shale; present only in Latrobe syncline near Klondike. Present only in Latrobe syncline near Klondike.	Only the basal, Waynesburg, sandstone present in the quadrangle.
		Monongahela formation.	Cm		400	Benwood limestone.	Blue limestone and earthy calcareous nodules, interbedded with shales and occasionally with beds of sandstone. Present in all synclines of the quadrangle.	The most important coal-bearing formation of southwestern Pennsylvania. The rocks are decidedly calcareous, but beds of sandstone locally develop in thickness until they become prominent members of the formation. The Pittsburg sandstone is the most notable lentil of this character.
						Sewickley coal. Redstone coal. Pittsburg sandstone. Pittsburg coal.	Not well developed. Not well developed. Coarse sandstone. Occurs on west side of Latrobe syncline in the vicinity of Latrobe. Six to eight feet of available coal of great value.	
	C A K B O N I F E K O U S PENNSYLVANIAN			Soor So		Connellsville sand- stone.	Not well developed.	
		Conemaugh formation.	Ccm		650-700	Morgantown sand- stone.	Generally coarse sandstone, but in places represented only by thin flags and sandy shale. Best developed in the vicinity of Blairsville.	Composed chiefly of shale, but also includes several beds of coarse sandstone, a few thin layers of impure limestone, and small coal beds. The shale is of various colors, but green and red predominate; the sandstones are fairly persistent, but in places they lose their distinctive characters and can not be identified; the limestones are irregular in thickness and distribution; and the coal beds are small and of slight economic importance.
0						Saltsburg sandstone.	Coarse sandstone, sometimes massive and conglomeratic, but in most places it is replaced by sandy shale. Saltsburg is the type locality.	
						Mahoning sandstone. Upper Freeport coal. Lower Freeport coal.	Coarse sandstone or conglomerate. Best shown on Conemaugh River and Loyalhanna Creek above Saltsburg. Four to six feet in thickness. Probably present throughout the quadrangle, except on Chestnut Ridge. Not very important.	Generally less sandy than either of the contiguous formations.
		Allegheny formation.	Ca		250 – 360	Kittanning coal. Vanport limestone.	Probably of workable thickness. Generally present. (Known only from well borings).	Generally less sandy than either of the contiguous formations. Composed largely of shale, but in places the Freeport sandstone is well developed above the Upper Kittanning coal, and another sandstone is present below the same horizon. Two prominent coal beds occur in this formation.
		Pottsville formation.	Сру		75-170	Brookville - Clarion coal. Homewood sandstone. Mercer coal?	Probably present on Chestnut Ridge and noted in a few drill records. Coarse, massive sandstone. Little known in this quadrangle.	Generally coarse, hard sandstone or conglomerate inclosing a thin
	MISSISSIPPIAN				90. 140	Connoquenessing sandstone.	Coarse, irregularly bedded sandstone.	irregular bed of shale. Red and green shales inclosing a lentil of variegated fossiliferous
		Mauch Chunk formation.	Cmc		30-140	Greenbrier limestone. Siliceous limestone.	Variegated fossiliferous limestone, approximately four feet thick. Bluish-gray, sandy limestone grading downward into calcareous sandstone.	limestone.
		Pocono sandstone.	Сро					Sandstones varying from thin-bedded, flaggy rock to coarse, irregularly bedded conglomerate. Bed of siliceous limestone at the top.
		(Base not determined.)			930 – 1070	Patton shale.	Red or green shale. Not known in outcrop in this quadrangle. (Rocks below this horizon not exposed in the quadrangle, and known only from borings.)	
					live -			Alternating bands of shale and sandstone.
	NAI				320 - 450	Sub-Blairsville shale.		Red shale and sandstone.
	DEVON							
					800+			Shale with thin beds of sandstone and occasional beds of limestone.
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WELL SECTIONS



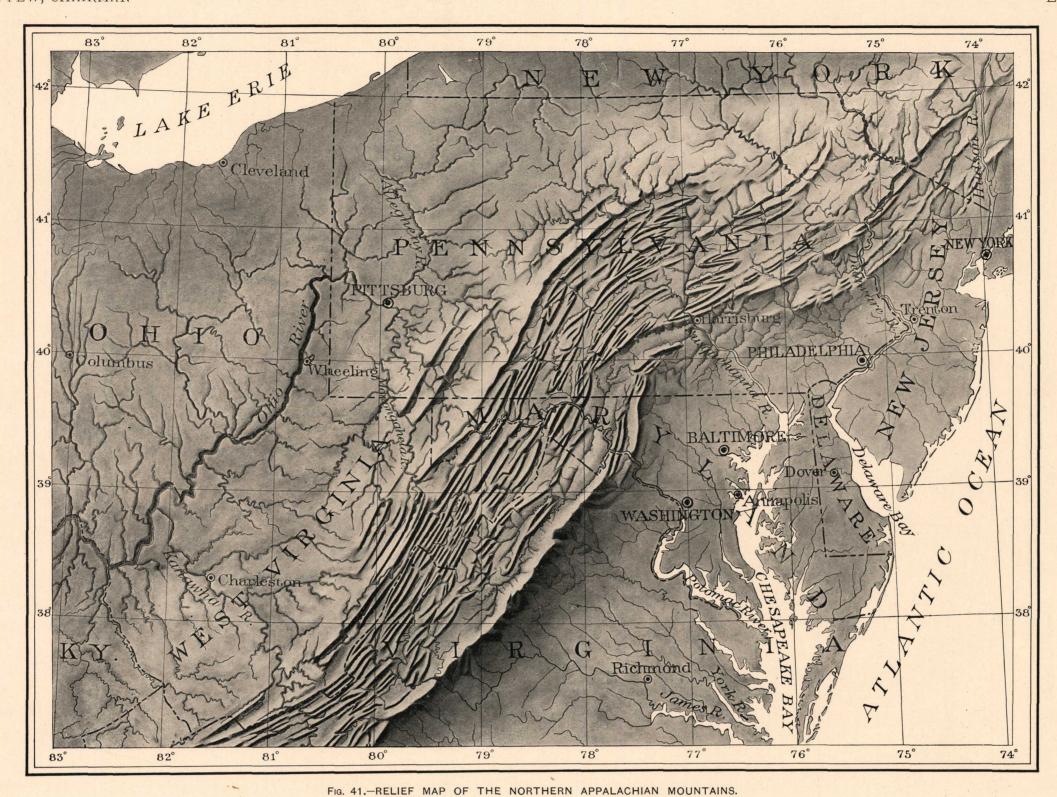
COAL SECTIONS

SECTIONS OF COAL BEDS IN THE LATROBE QUADRANGLE. SCALE: 1 INCH=5 FEET.

LOWER FREEPORT COAL. KITTANNING COALS. FIGURE 7. FIGURE 4. FIGURE 5. FIGURE 6. FIGURE 8. ELDERS RUN. SUMMIT CHESTNUT RIDGE. SAWMILL RUN. SUMMIT CHESTNUT RIDGE. LOYALHANNA CREEK NEAR SALTSBURG. UPPER FREEPORT COAL. FIGURE 11. FIGURE 12. FIGURE 13. FIGURE 14. FIGURE 15. FIGURE 10. FIGURE 16. FIGURE 17. FIGURE 9. NEAR DARLINGTON. NEAR DARLINGTON. SUMMIT CRESTNUT RIDGE. NEAR DARLINGTON, TROUT RUN. KINGSTON. NEAR YOUNGSTOWN. MILLER RUN. NEAR DERRY. 3' 2" coal. 3'3" coal. 4'0" coal. 4' 0" coal. Shale1'2" UPPER FREEPORT COAL. ELK LICK COAL. FIGURE 18. FIGURE 19. FIGURE 20. FIGURE 21. FIGURE 22. FIGURE 23. FIGURE 24. FIGURE 25. NEAR DERRY. SUMMIT CHESTNUT RIDGE. CONEMAUGH RIVER. LOYALHANNA CREEK. LOYALHANNA CREEK. LIGONIER VALLEY. DRY RIDGE. DERRY. 0'6" coaly shale. 2' 6" coal. 0' 9" coal. 1'2" coal. 0'5" coal. 1'0" coal. Shale 1'9" Shale.....1'6" PITTSBURG COAL. FIGURE 27. FIGURE 28. FIGURE 29. FIGURE 30. FIGURE 31. FIGURE 32. FIGURE 33. FIGURE 26. WEST OF NEW DERRY. KLONDIKE. SOUTHWEST OF BEATTY. BEATTY. BRADENVILLE. STONY RUN. BLAIRSVILLE. SOUTHWEST OF KLONDIKE. Main clay .. 0' 7" Main clay .. 0' 5" Main clay .. 1'3" 1'0" shale and coal. Clay0'6" 3' 8" coal. Main clay .. 1'6" 1' 11" coal. Shale.....0' 6" 0'8" bony coal. Clay0'1" Clay0'1" 0' 3" coal. 0' 4" coal and slate. Main clay .. 1' 3" Slate0'1" Slate0'1" Main clay .. 1'9" 0'8" bony coal. Slate0' 11/2" Clay0' 10" 2' 4" coal. 1' 1" coal. 0' 3" coal. 2' 6" coal. 3' 0" coal. 3' 2" coal. Clay..... 0'1" 0' 3" coal. 0' 10" coal. Clay... ...0'1" 1'6"-coal. PITTSBURG COAL. WAYNESBURG COAL. FIGURE 35. FIGURE 34. FIGURE 36. FIGURE 40. FIGURE 37. FIGURE 38. FIGURE 39. GEORGES STATION. WHITETHORN CREEK. WEST OF NEW ALEXANDRIA. NEW ALEXANDRIA. FAIRBANKS. WEST OF SALTSBURG. EAST OF KLONDIKE. Main clay ..0'6" Main clay .. 1'6" Main clay .. 1'0" 2' 0" coal. Main clay .. 1'2" Main clay .1'6" 3' 2" coal. 2'6" coal. 5' 0" coal. 0' 4" coal. 4' 1" coal. 0' 7½" coal. 0' 3" coal. 0' 10" coal. 1'3" coal. 0' 3" coal. 0' 7" coal. 1'0" coal. 0' 8" coal. 1'6" coal. 1'8" coal. 0' 8" coal.

MARIUS R. CAMPBELL,

Geologist.



The Latrobe quadrangle is situated on the plateau lying west of the belt of valley ridges, in the southwestern part of Pennsylvania.

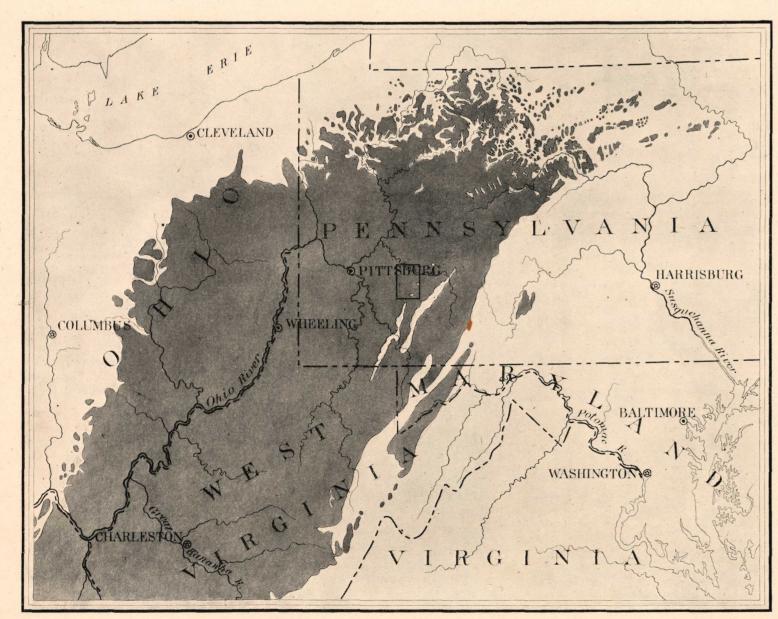


Fig. 42.—MAP SHOWING THE EXTENT OF THE NORTHERN PART OF THE APPALACHIAN COAL FIELD.

The position of the Latrobe quadrangle within the coal field is shown by the rectangle.

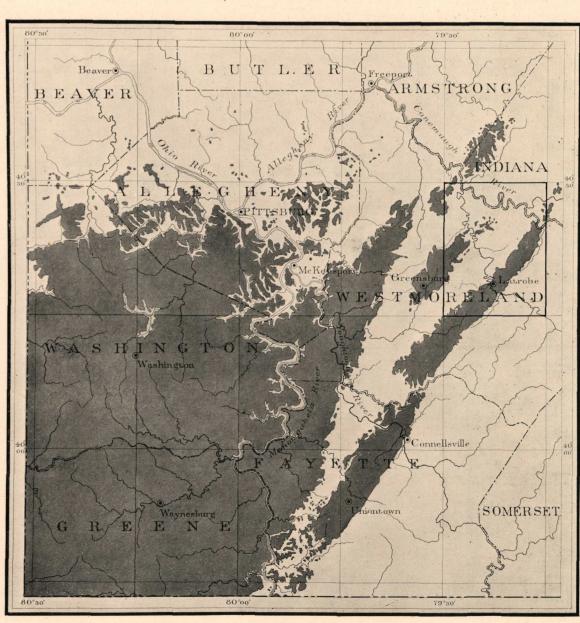


Fig. 43.—MAP SHOWING THE AREA OF THE PITTSBURG COAL IN PENNSYLVANIA.

The Latrobe quadrangle is situated on its eastern border.